

ALPHA SMART 700 **EDGE BANDER**

with PUR capabilities



Work stations:

Oscillating buffing	Pneumatic flat scraping	Scraping with automatic tool adjustment	Corner trimming with 4 motors	Fine trimming with automatic tool adjustment	Rough trimming	Double rail end trimming	Snipping	Quick-melt	Pre heating	Pre-milling
•	•	•	•	•	•	•	•	•	•	•

Basic Functions:

1. Large pre-melt tank allows sufficient glue for even, fast continuous edge banding;
2. Trimming functions standard with rough trimming, auto tool adjustment at fine trimming and scraping.
3. Use of dual rails end trimming and 4 motors with tools corner trimming;
4. Panels are evenly pressed by V-belt to maximize stability.
5. Standard with dual tapes changing system.
6. Speed of corner trimming unit up to 26m/min.

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Technical data

Panel length	≥120 mm
Panel width	≥60 mm
Mini. panel size	120×120mm; 60×200mm
Panel thickness	10-60mm
Edge tape thickness	0.4-3 mm
Feeding speed	16-26 m/min
Dust collector	Φ 125mm×8
Control mode	Travel switch
Display screen	Touch screen 7" Delta
Working table height	920mm
Power supply	380 V; 50 Hz, 3 phase
Air pressure required	0.7 MPa
Total power	22 kW
Net weight	5,450 kg
Overall dimension	9470*1450*1650mm

λ Max. traveling speed up to **26m/min** to process panels with 10-60mm thickness, and the thickness of edge tape is 0.4-3mm.



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Fundamental Structure:

- **Pressure feeding device:** pressing panels with v-belt, the rise and fall of the beam is electrically controlled, and positioning information can be shown numerically;
- **Conveyor chain:** the conveyor chain is fed by a semicircle guide rail;
- High precision settable pressure application mechanism for board feeding;
- Trimming and snipping unit with 2 spindles.
- Processing unit equipped with independent suction hood.

Details:

1. Machine body

- The steel plate is cut by laser and made via welding, utilizing natural aging to relieve the internal stress of the engine base.
- Guiding plate for feeding is adjustable.

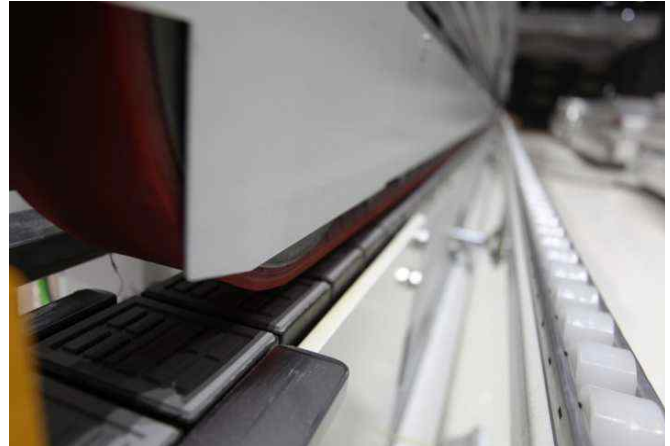


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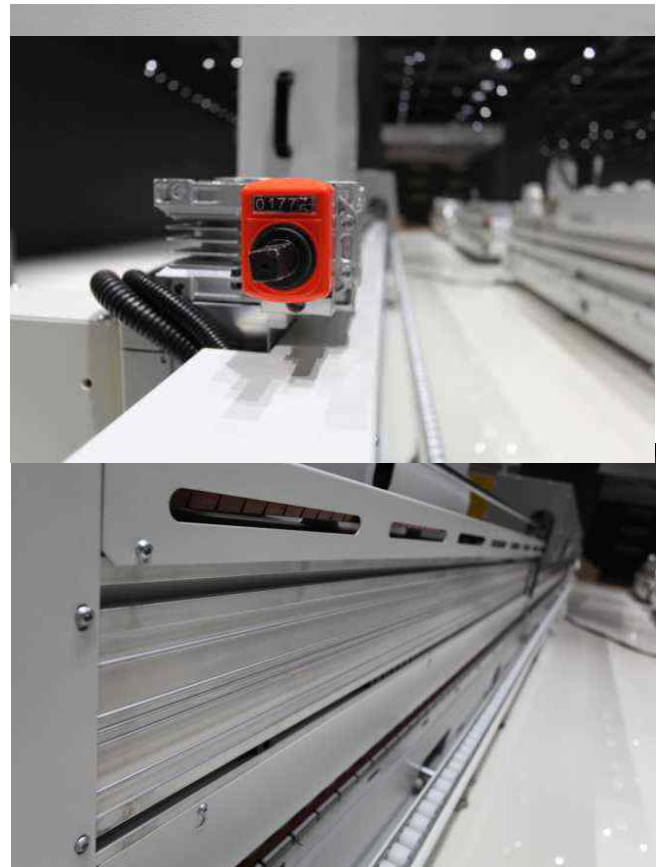
2. Conveyor

- Conveying piece is wear-proof.
- The panel support frame of panels coupled with roller guide so as to pull the panels about 600mm in width.
- Abrasive resistance of accurate semicircle guide rail is improved based on hardening treatment
- Conveying electrical machine makes variable frequency starting possible, very stable and equipped with braking system to prevent operator from danger.
- The speed of conveyor belt can be adjusted in sections i.e., 12m/m、 20m/min、 24m/min.



3. Pressure beam

- Pressing panels by V-belt, coupled with high quality rubber ensure panels are transmitted steadily.
- Aluminum pressure beam provides high precision and excellent stiffness.
- The position of pressure beam is available at a glance by using digital display meter for adjusting and resetting rapidly.
- The up and down movement of the pressure beam is driven by a three-phase asynchronous motor, available to operate in touch screen.



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4. Safety device

- **Interval feeding detection system** designed for controlling processing distance to enhance productivity.
- A **safety protection device** prevents any possible accidents and ensures safe operation of operators, automatic monitoring abnormal operation.
- **Scram button** is designed to stop running at once, for operator safety.
- **Max. panel thickness detection**, if panel thickness over the limited position, conveyor will stop at once.



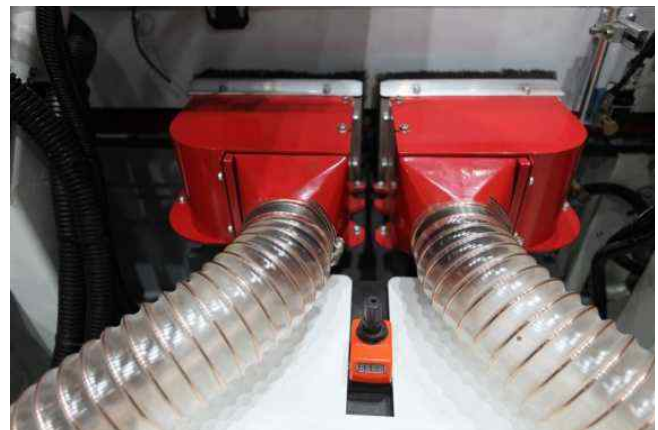
5. Pre-heating device

- Pre-heating the panel before gluing forms the optimum basis of a high standard of gluing.



6. Pre-milling unit

- Pre-milling unit for deburring, guarantees perpendicularity and removing straightness errors of edge banding sides.
- Milling cutter adopted diamond cutter. $\varnothing 125 \times 35 \times 30$ Z3+3
- Two motors pneumatic controlled, milling panel edge intermittent.
 - $2 \times 3.7\text{kW}$ motors; 170hz
 - Rotating speed: 12000 rpm.
- Blowing air cleaning device



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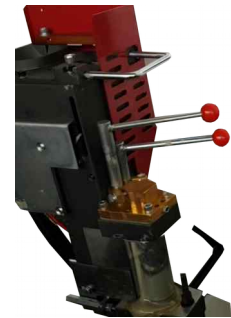
7. Pre-melt system

- Equipped with pre-melt system, heating up at a high speed, increase the convenience to change glue.
- Screw type dispensing glue
- Glue particle dissolve device, the quantity of glue up to 820g~920g/min (parameter will change with different glue), when air pressure of dispensing glue reaches 4 bar.
- Liquid level sensor detector used to control quantity of glue, prevent glue from spill.
- Electric temperature can be adjusted by touch screen.



PUR Capability

- PUR glue pot for quick release
- Second glue pot included
- Cleaning and heating station for glue pot
- Chest freezer for PUR glue pot overnight storage



8. 2 tapes edge changing system

- Multi rolls tape loading frame, standard with 2 positions.
- Automatically switch to next position if present position without tape, save time for changing tape. Thick and thin tape can be switched by pressing key once.
- A tape loading frame.
- Information on whether there is edge tape or not can be shown via detector.
- Snipping device.



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9. Pressure roller

- One pre-pressure roller with a diameter of 100mm, 4 post rollers behind including 2 taper rollers and 2 straight rollers to press edge tape on panel surface firmly.
- Pressure regulating valve 1.5~2.5 bar



10. End trimming

- Split-type precision dual linear guide way structure at an angle of 45 degrees;
- 2 motors with power of 0.37kw, frequency of 200hz, rotating speed of 12000rpm/min;
- Min. panel interval 300mm.
- Motor manual rotating device available to adjust angle.
- 2 saw webs with a specification of 115*2.6*22*24Z;
- Equipped with independent protective cover.
- Automatic lubrication system.



11. Rough trimming (standard)

- Rough trimming unit with 2 powerful motors (power 0.75kw; frequency 200hz; rotating speed 1,2000rpm/min) is used to trim out top and bottom excess edge;
- The angle of electric machine is adjustable by manual operation, 0 to 5 degrees;
- Processed with 2 milling cutters;
- Independent dust extraction.



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12. Fine trimming with automatic tool adjustment

- Motor: 0.5kw*2
Frequency: 200Hz;
Rotating speed:12000rpm/min
- Motor angle can be adjusted.
- Fine trimming cutter*2 (circular arc radius: R2, 4Z)
- Independent dust extraction.



13. Corner trimming unit

- Designed to trim sharp corner on front, back and two straight edges so as to achieve R circular arc radius.
- Driven by 4 motors (power: 0.3kw; frequency: 200 Hz, rotating speed: 12000rpm/min).
- Planar linkage.
- 4 corner trimming tool R2 3Z
- Max. edge banding speed up to 20m/min
- Independent dust extraction.



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14. Scraping unit with automatic tool adjustment

- Scraping the edge by R2 cutters, making edge banding more beautiful.
- Equipped with electric pneumatic controlled blowing air device.
- Independent suction extraction.



15. Oscillating buffing

- Buffing unit with dual screen cloth structure to polish the top and bottom edges without any scratches on panel surface.
- Driven by continuous current inverter for greater stability.



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16. Release agent and detergent (OPTIONAL)

- Used to prevent excess glue on panel surface.
- Convenient to clean panel surface after edge banding.



17. Electric equipment

- Input voltage, 3-380v, 50hz;
- Frequency converter with motor braking function;
- Phase sequence protector
- All the electric equipment conform to relevant national standard.
- Permitting to be operated under the temperature of 0-40℃.



18. Operation system

- Adopted 7" touch screen. Operation interface is intuitive and simple, available to control each component independently and generate statement accordingly.
- Each working unit is controlled by independent frequency converter.
- Most of electric components of the machine adopted international brands for high quality and generality
- System languages: English



- *Due to the continuous improvements of the products, some changes for better machine may apply.*

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Strategic Qualifications

WoodTech is a company that manufactures specialized machinery primarily in the woodworking and plastics industry.

Historically we have been in business for 20 years and have machinery from our plant working in 20 countries on 5 continents and have distributors in 4 countries. Our product reliability and quality is professed by our customers and distributors. All machinery manufactured by WoodTech from day one are to the best of our knowledge still in active production.

WoodTech entered the CNC market thirteen years ago after a year's development in this area. Our development since then has been ongoing, seeking out the best components and systems to provide on our machines relative to the market segment that we aim those machines at. We believe we have mastered all aspects of CNC router manufacturing in the high performance 3 axis machines. Our top model, the C-Nest Prestige Router, currently performs at 90m/min rapid and 50m/min cutting speed and accelerations of 2,5 m\sec² which is among the highest in the industry. WoodTech does design its machines to be fit for purpose and is economical when correctly compared to opposition products.

WoodTech's facilities are of sufficient standard and capability to complete the entire project in house although some specialised work may be decided on to be contracted out. Our managing director is a mechanical engineer and our design engineers are also qualified mechanical and mechatronic engineers.

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